

Fourteen chapters of this second edition are entitled "Molecular Mechanisms of Drug Action," "The Absorption, Distribution and Elimination of Drugs," "Drug Metabolism," "The Time Course of Drug Action," "Drug Toxicity," "Pharmacogenetic and Drug Idiosyncrasy," "Drug Allergy," "Drug Resistance," "Drug Tolerance and Physical Dependence," "Chemical Mutagenesis," "Chemical Carcinogenesis," "Chemical Teratogenesis," "Drug Development," and "Drug Evaluation in Man."

This should be a required text for all students of the health sciences but because of the many demands on the students' time, it will usually be read only by students with a primary interest in pharmacology. Nevertheless, it should be in the library of every practitioner who deals with drugs and patients on a daily basis. It contains the answers to many questions which arise in the daily practice of medicine and is actually a remarkable condensation and interpretation of an exploding literature on the fundamentals of pharmacology and toxicology. Fortunately, basic principles change slowly; this book will have double or triple the useful life of a standard systematic textbook of pharmacology. In addition to being an essential text for all students of pharmacology and a highly recommended reference for all medical students and practitioners of drug therapy, it is also a useful basic reference for scientists other than pharmacologists who wish to incorporate drugs or chemicals into their research programs. The book is well illustrated and referenced and the style is enticing. It can be read with pleasure and profit by novice and experienced pharmacologists alike.

H. W. ELLIOTT, MD

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IMMUNOLOGICAL ASPECTS OF SKIN DISEASES—Edited by Lionel Fry, BSc, MD, MRCP, and P. P. Seah, MB, MRCP, Department of Dermatology, St. Mary's Hospital, London. John Wiley & Sons, Inc., Publishers, 605 Third Avenue, New York City (10016), 1974. 289 pages, \$19.95.

This is a slim volume by a number of internationally known authors covering six dermatological problems, dermatitis herpetiformis (DH), pemphigus and pemphigoid, lupus erythematosus, malignant melanoma, vasculitis, and eczema. The chapter on dermatitis herpetiformis is written by the British editors, Drs. Fry and Seah. It is a concise and lucid account of the present standing of this disease. Although there is still some dispute as to the diagnostic criteria for DH notably by Drs. Shuster and Marks, the authors maintain that the presence of IgA deposits on the reticulin fibers of the dermal papillae and upper dermis in the uninvolved skin is necessary for the diagnosis. If this is accepted then the authors show that the disease is associated with a 95 percent incidence of gluten sensitive enteropathy. (Multiple biopsies may be necessary to establish the gut abnormality and this may not be evident macroscopically but only microscopically by counting the number of intraepithelial lymphocytes, which are high in the disease.) DH may be controlled by a strict gluten-free diet alone although this may take months, even years, of diet before dapsone can be completely discontinued. They believe that celiac disease and DH are essentially manifestations of the same disease process, the significant difference being the presence of the IgA deposits in DH and not in celiac disease. Antireticulin antibodies have been found in both diseases and it may be that in DH both the reticulin in the skin and gut is abnormal but only in the gut in celiac disease. Immune complexes are found in DH and celiac disease and C3 deposits without C1q are found

in the skin in DH. They suggest that the immune complexes, where gluten is the immunogen, react with IgA deposits in the skin fixing complement by the alternate pathway which is followed by the formation of membrane vacuoles (which they have demonstrated at the ultrastructural level) which appear to enlarge to form the blister characteristic of DH.

Taking this chapter as a model for the rest of the book, a happy balance of information for the dermatologist, internist and immunologist alike, in that historical, clinical and pathological features, immunological techniques and findings, therapy and conclusions are discussed, certain chapters seem uneven. Thus, the discussion of pemphigus and pemphigoid where great advances have been made in the finding of both circulating and *in vivo* bound antibody to the intercellular cement substance in pemphigus and to the basement membrane in pemphigoid, covers mainly the principles and methodology in immunofluorescence. This is unfortunately discussed again in a subsequent chapter. Only a few pages are devoted to the diseases, which though familiar to the dermatologist are not so for other specialists, and no mention is made of clinical features or therapy.

There is only one page of references whereas by contrast Professor Stephanie Jablonska gives thirty pages which though admirable might be a little extreme in such a short book. However, her chapter is excellent and comprehensive. Of particular note for the clinician, the investigation of lupus is not complete without tests for anti-DNA antibodies, serum complement levels and skin immunofluorescence. The latter is positive in normal skin, preferably taken from the dorsum of the wrist, in SLE but negative in discoid LE but may be positive in the active disease in both. The patterns of ANA staining are clearly discussed and their relation to the diagnosis of drug induced and spontaneously occurring collagen diseases.

In the chapter on vasculitis there is an excellent review of the experimental work in animals on the Arthus, Shwartzman and serum sickness reactions but their relations to the clinical state are summarily dealt with.

Professor Nairn discusses the immunogenic nature of malignant melanoma. He includes a great deal of detail concerning laboratory techniques which might seem unnecessary. Although cell mediated immunity is probably most important locally, serum cytotoxic antibodies against melanoma cells are demonstrable in primary disease but tend to disappear with dissemination suggesting that they are of value in preventing blood-borne metastasis. Their possible role in and the concept and possibilities of immunotherapy are discussed.

The final chapter on eczema is logical, tracing the discovery of the P-K serum factor to the isolation of the reaginic antibody IgE. The relevance of increased levels of circulating IgE to atopic eczema, a disease characterized histologically by the presence of lymphocytes more reminiscent of a delayed hypersensitivity reaction is discussed. The current hypothesis is that the disease is a result of a malfunctioning immunological mechanism which may result from excessive antigen stimulation of a normally responsive IgE system during a transient gut IgA deficient period in infancy. The section on contact dermatitis will be familiar to most readers.

In summary, this is a good book, short and inexpensive providing a lot of very useful information. It might however be improved if it were better balanced.

ANTHONY DU VIVIER, MB, MRCP